An Overview of Tippecanoe County's 2019 Annual Trending

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County Name: Tippecanoe

Person Performing Ratio Study: Eric Grossman (765 423 9263; egrossman@tippecanoe.in.gov), Chris

Coakes (765-423-9374; ccoakes@tippecanoe.in.gov)

Vendor Name: No trending or reassessment vendor – this is the core of assessment work and should

not be contracted out.

Additional Contacts: N/A

Sales Window: 1/1/18 to 12/31/18

Groupings: There were not enough valid sales in Industrial Vacant, Commercial Vacant and Industrial Improved in Tippecanoe County in 2018 for ratio analysis. There were enough valid Commercial Improved sales to perform a ratio study for Fairfield Township, which represents the majority of Lafayette, Indiana. Commercial Improved sales from all other townships in Tippecanoe County were grouped together for a separate Commercial Improved ratio study, as there were not enough Commercial Improved sales in any one township to constitute a ratio study independently.

The Residential Vacant ratio study has two groupings of parcels. The first grouping is comprised of Lauramie, Shelby, and Wayne Township. These townships comprise the rural and sparsely populated West and South-West Tippecanoe, in contrast to the area around the Lafayette-West Lafayette metropolitan area. The second grouping is comprised of Perry, Sheffield, and Washington Townships. These contiguous, Eastern townships are also considered to be rural but contain more desirable, scenic homesites and increased residential and commercial development. There were no valid Residential Vacant sales in Randolph and Jackson, but they would have been grouped with the rural S/SW townships. The remaining townships had enough Residential Vacant sales for independent ratio analysis.

There were sufficient sales in every township except for Jackson to perform Residential Improved ratio studies. No grouping was used for Residential Improved sales.

AV Increases/Decreases greater than 10%:

Property Type	Townships Impacted	Explanation
Commercial Improved	none	
Commercial Vacant	none	
Industrial Improved	none	

Industrial Vacant	none	
Residential Improved	none	
Residential Vacant	none	

Cyclical Reassessment: Shelby, Wabash, and Washington Townships were all reviewed in the most recent completed phase of Cyclical Reassessment. The land order was not completed for 2019, but will be for next year, effective for 2020 annual adjustments.

Comments:

We urge the DLGF to adopt IAAO 2013 Guide to ratio studies, especially with respect to level of assessment. The following table and advice from the IAAO 2013 Guide to ratio studies provides instruction on how to handle high variability and small sample sizes:

Table 2-4. Ratio Study Standards and Decision Making—Direct Equalization or Appraisal Performance Using Median 90%–110% Standard

Example demonstrating application of standard at a 95% level of confidence

		Confidence Interval (CI)	CI Overlaps Performance	Point Estimate in Performance	Equalization Action or
Case	Point Estimate	Width (95%)	Standard Range	Standard Range	Reappraisal Order
1	92%	86% to 101%	yes	yes	no no
2	88%	81% to 95%	yes	no	no
3	84%	79% to 88%	no	no	yes

- •If a particular point estimate does not meet the standard for the current study cycle the oversight agency may reduce the level of confidence by 5% the following year. This may be followed by an annual stepwise reduction of 5%. Such a reduction may continue to a 70 percent level of confidence if the point estimate fails to meet the compliance threshold over this period of time. Corrective action would be imposed when a given year's confidence interval fails to include the performance standard range.
- •The oversight agency may examine statistical point estimates over several study cycles. A jurisdiction that fails to meet a particular point standard for 5 consecutive years has a probability of less than 5% that compliance has been achieved, even if the confidence interval overlaps the compliance threshold every year. In such cases the oversight agency would impose corrective decisions based upon the point estimate.

IAAO 2013 Guide to ratio studies P 35

The DLGF provides the following instruction as part of the sales disclosure review process:

However, if your county's 2018 valid for trending percentages are below the targeted thresholds of 35% (for all submitted sales records) and/or 55% (for all submitted sales that are marked valuable for consideration and fee eligible), the Department's

Assessment Division may be following up with you to coordinate an opportunity to meet and discuss the processes in place for reviewing and validating sales. *Please stay tuned for further information from your Assessment Division field representative on this topic.*

It would seem that ratio studies utilizing somewhere in the 70% range of total sales would not be comparable to a ratio study that utilizes a number closer to the "targeted threshold". The 2013 IAAO Guide to ratio studies also stresses the problems with comparing ratio studies with different trimming policies:

5.2.2 Outlier Trimming: Statistics calculated from trimmed distributions, obviously, cannot be compared to those from untrimmed distributions or interpreted in the same way. **This is especially problematic when making interjurisdictional comparisons.** For this reason, oversight agencies may wish to promulgate uniform trimming procedures, based on sound statistical principles. Regardless of the chosen procedure, trimming of outliers must not occur more than once for any sample. P 27

The 2013 IAAO Guide to ratio studies also discusses the maximum number of sales that can be trimmed:

It is also appropriate to set maximum trimming limits. For small samples, no more than 10 percent (20 percent in the most extreme cases) of the ratios should be removed. For larger samples, this threshold can be lowered to 5 to 10 percent depending on the distribution of the ratios and the degree to which sales have been screened or validated. Trim limits should be developed in consideration of the extent of sales verification. P 54

Given the extremely low percentage of sales permissible, ratio studies in Indiana have little relevance to each other. The sanctioned trimming of most sale ratio data, several hundred percent in excess of IAAO recommendation, and the penalization of Counties that include high percentages of sales in more candid ratio studies, undermines the DLGF ratio review process. We urge the DLGF to maintain reasonable and fair trimming policies considering the property type distribution of the County.